



ENERGY FOUNDATION
能源基金会



EFC COAL TRANSITION QUARTERLY

NEWSLETTER OF ENERGY FOUNDATION CHINA'S COAL TRANSITION TASK FORCE

ISSUE 8

August 2023

Preparation team: led by Cynthia YU, GAO Yuan, ZHANG Lingyue.



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Foreword by Cynthia Yu

Director, Coal Transition

China's economy have slowed down since April 2023. Overall, the Q2 GDP grew 6.3% YoY by a base effect and up only 0.8% QoQ, due to the low consumption, housing slump and deteriorative trades. China's manufacturing PMI has been below the threshold of 50 since April. Unlike many other parts of the world, China's CPI and PPI have been below 1%, triggering deflation concerns.

Climate risks in H1 2023, on the other hand, were the most critical factor that impacted China's energy sector. Drought conditions led to more than 20% of hydropower output decrease. Heatwaves led to a 5% increase in power demand despite the economic slowdown. Thermal (+7.5%) and wind (+25%) power contributed primarily to both the incremental power demand and compensated the loss of hydro power. Yunnan, the key hydropower exporter to Guangdong, experienced historically recorded drought since 1961 and only relieved with increasing rainfall since June 9th. Sichuan, the key hydropower exporter to East China, experienced continued drought conditions in H1 2023, with temperatures higher than its historical average. Heatwaves came earlier and more frequently. North China experienced 10 days of highest temperature, and about fifteen provinces experienced heatwaves. To avoid a potential power crisis like the ones happened in 2021 and 2022, China's coal inventory was kept above 20 days on average at power plants and around 17 days at railway transportation.

Though China's power system still relies on coal power, supportive policies and investment preference are biased towards non-fossil fuel flexibility. To support higher renewable penetration, China's incremental pumped hydro capacity reached 8.8GW in 2022. In addition, about 69GW of new capacity has been approved and 121GW is under construction. In May, National and Development and Reform Commission (NDRC), for the first time, set up a pricing mechanism for pumped hydro power, as well as a capacity fee for plants that is operational and to-be-operated by 2025. Under a supportive green agenda and clear pricing model, power players and financiers show strong interest in investing in pumped hydro power.

On the other hand, the government doesn't provide coal power with any pricing support though it is widely used for flexibility purpose. Coal power continues to experience tough operational conditions due to severe power price competition. Take Huaneng as an example. Despite of a 10% coal price drop YoY, Huaneng's coal power sector contributed only 5.8% of the total profit with about 74% of total power capacity. Many power plants in Wuhai, a municipality in Inner Mongolia where coal mines and coal power are concentrated, experienced negative settles in May.

Current policy trend presents both opportunities and challenges. In July, China signals deeper reforms in oil/gas markets and power networks, focusing on carbon emission and systematic flexibility/efficiency, elevating the importance of energy system security, and emphasizing the oil and gas security capabilities and reliable supply. In power sector, building an economically efficient, flexible and intelligent coordination mechanism for the power system is indicated. For the first time, data security in the energy sector is emphasized as well. For EFC, we need to catch the policy momentums to support deepening energy reform while considering how green development support China's economic development and employment growth.



Note from ZHANG Yongping

Program Director, Clean Power Program

2022 was the year when global energy security came at a premium, even as the transition picks up speed. In 2022, roughly 39% of the world's electricity came from non-carbon-emitting resources (including renewables and nuclear). For the first time, wind and solar generation served 12% of global power demand, rising from 10% in 2021. The growth alone in wind and solar generation met 80% of global electricity demand growth in 2022. Coal generation in 2022 increased by 1.1%, in line with average growth in the last decade. However, we saw the lowest number of global coal plant closures in 2022 over the past seven years.

China topped the list of new clean power capacity installed, with a renewables “surge” as the theme of China's power sector transition in the past decade. In 2022, with 125GW of new wind and solar, total wind and solar installed capacity rose to 755 GW, and was responsible for 13.7% of the country's electricity production. Total electricity production from renewables (including large hydro) was 31.3%, up from 29.4% in 2022. And perhaps most exciting is that 2023 H1 marked the first time that the total installed non-fossil energy capacity exceeded that of fossil fuel power as 50.9%.

To better coordinate between China's security narrative and its near-term ambitious carbon peaking goal toward 2030, EFC Clean Power Program has been not only supportive in researching China's renewable-energy potential and providing findings to the key policy stakeholders for sector's goal settings, but also working on how to implement these sectoral targets with on-the-ground supporting policies for market, business, and local deployment by pilot scaling-up. Highlights of our recent work include:

- **National Power Market:** we co-organized a report launch event with International Energy Administration (IEA) in April to release the Building a Unified National Power Market System in China report that EFC supported, with high media exposure and attention.
- **National New Power System:** We supported the Rocky Mountain Institute on a report titled “Exploring China's Pathway to a New Power System” in January, together with consultant seminars, which pushes efforts for China to release the official guide on new power system construction in June.
- **Local Engagements:** We supported Guangdong Electric Power Design Institute to produce a report on Guangdong's electricity price policies and supporting mechanisms for a carbon neutrality-compatible new power system. Inner Mongolia and Jiangsu are also among our work priority.
- **International Cooperation:** We jointly supported Asian Infrastructure Investment Bank (AIIB)'s market study on energy transition and green digital infrastructure for Southeast Asian countries, and successfully leveraged AIIB's USD 120 million clean energy investments to the region in March.

If you are interested in obtaining more info about our clean power work, please reach out to ZHANG Yongping (zhangyongping@efchina.org).

Coal Data Updates

Summary of economic and energy trends in H1 2023

China's economic growth accelerated from 4.5% YoY in Q1 to 6.3% YoY in Q2, pushing H1 growth to 5.5% YoY. In H1 2023, the total retail sales of consumer goods, the added value of industries and the total exports respectively increased by 8.2%, 3.8% and 3.7% YoY.

Meanwhile, both national energy demand and power consumption accelerated from Q1, reaching 5.1% and 5% YoY by the end of June 2023.

In H1 2023, hydropower output saw 22.9% YoY shrinkage due to weather factors. Wind power generation saw fastest YoY growth in H1 2023, reaching 16.0%.

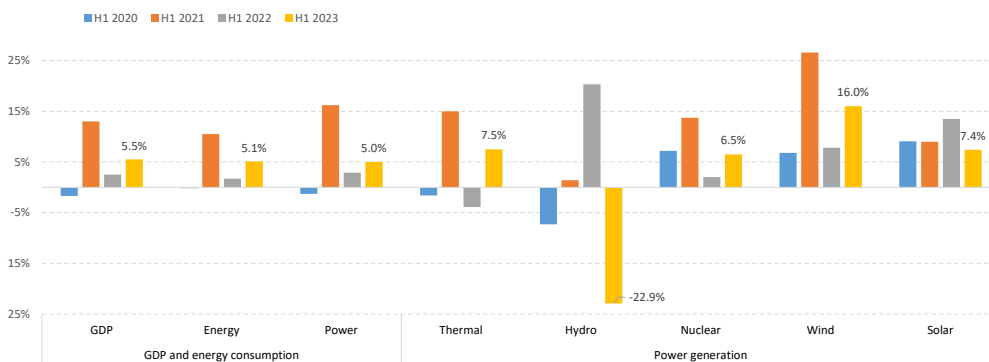


Figure 1. YoY changes of China's key economic and energy indicators, 2020-2023

Source: National Bureau of Statistics (NBS) and China Electricity Council (CEC).

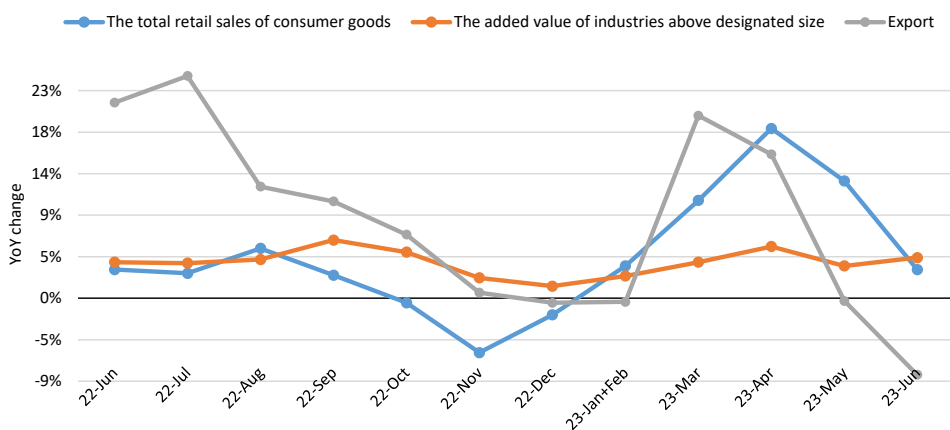


Figure 2. YoY changes of China's key economic performance indicators

Source: NBS.

Coal production

By the end of June 2023, China's coal production expansion moderated from 5.5% YoY in Q1 to 4.4% YoY in H1, accumulating to 2300 million tons (Mt). Over the first six months of 2023, the monthly YoY growth of coal production evidently sped down compared with 2022.

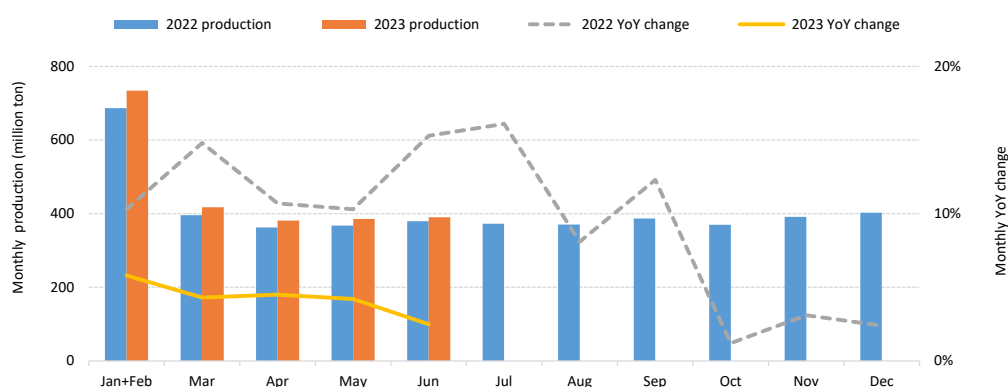


Figure 3. YoY change of China's monthly coal production: 2022 vs. 2023

Source: NBS.

National coal production is highly concentrated in the top producing regions. Specifically, the top ten and top four provinces respectively stand for 94% and 81% of national coal production.

Province	Coal production	YoY change	Share of total national production
Shanxi	678.383	5.2%	29.5%
Inner Mongolia	606.916	2.2%	26.4%
Shaanxi	372.711	1.3%	16.2%
Xinjiang	211.511	16.5%	9.2%
Guizhou	62.348	7.1%	2.7%
Anhui	56.484	1.8%	2.5%
Henan	50.474	3.2%	2.2%
Ningxia	48.812	4.1%	2.1%
Shandong	42.611	-1.5%	1.9%
Yunnan	37.775	20.9%	1.6%

Table 1. China's top 10 coal producing province in H1 2023 (Unit: Mt)

Source: NBS.

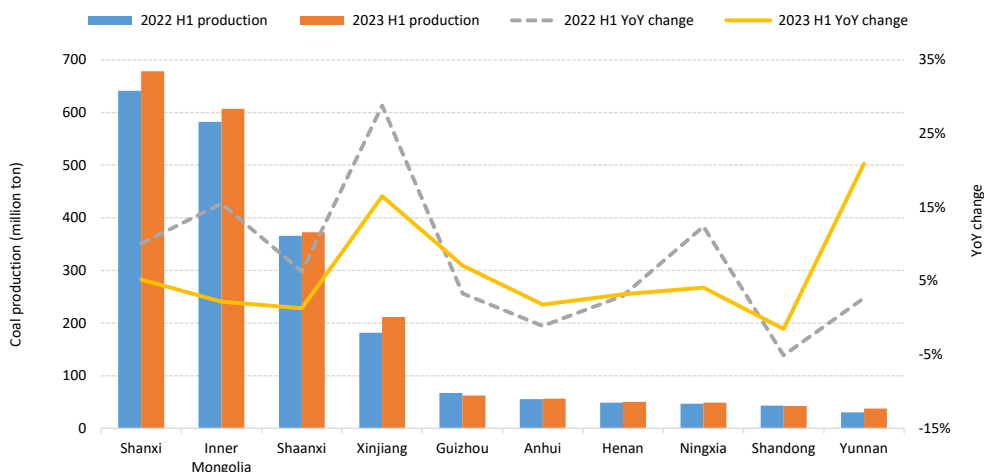


Figure 4. China's top 10 coal producing provinces: 2022 vs. 2023

Source: NBS.

From global perspective, coal market has gradually stabilized after a series of shocks in the past three years. The three largest coal producers – China, India and Indonesia – all produced record amounts in 2022, still kept a relatively high YoY growth in H1 2023. By contrast, the YoY growth of coal production in the United States and the European Union saw evident reduction in the same period. Newcastle coal futures traded near a [2-year low](#) of USD 130 per ton, which is partly driven by concerns of oversupply from India and Indonesia, despite rising import demand from China.

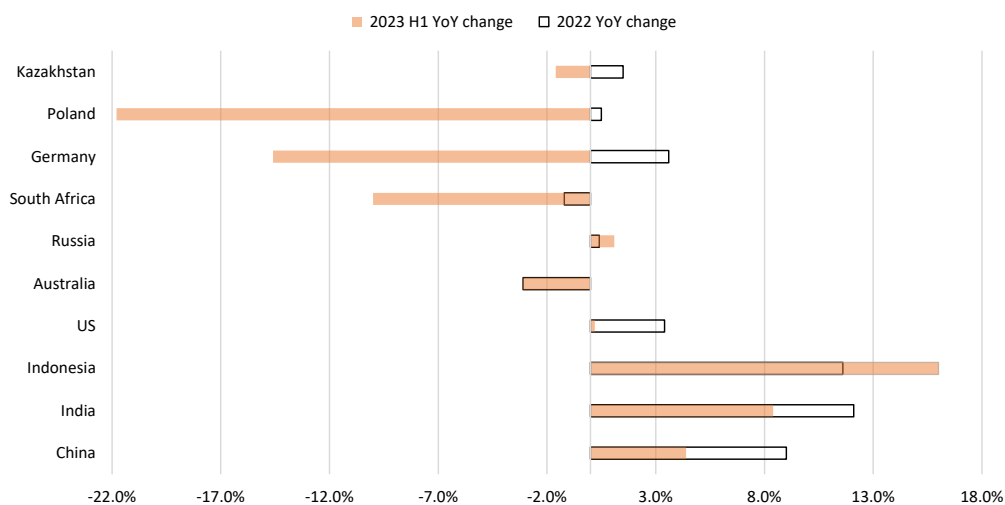


Figure 5. YoY change of coal production in top 10 coal producing countries in H1 2023

Source: [China Coal Economic Research Association](#).

Note: German is based on data of Jan-May in 2023; South Africa is based on IEA estimation; and Australia is based on data of Jan-Mar 2023 and Jan-Sep 2022.

Coal imports

By the end of June 2023, China's coal import reached 221.93 Mt, witnessing 93% YoY increase in volume and 60.5% YoY increase in value of RMB.

Meanwhile, according to the China's imported coal index compiled by CEC, the import price of coal is basically sliding since the beginning of 2023.

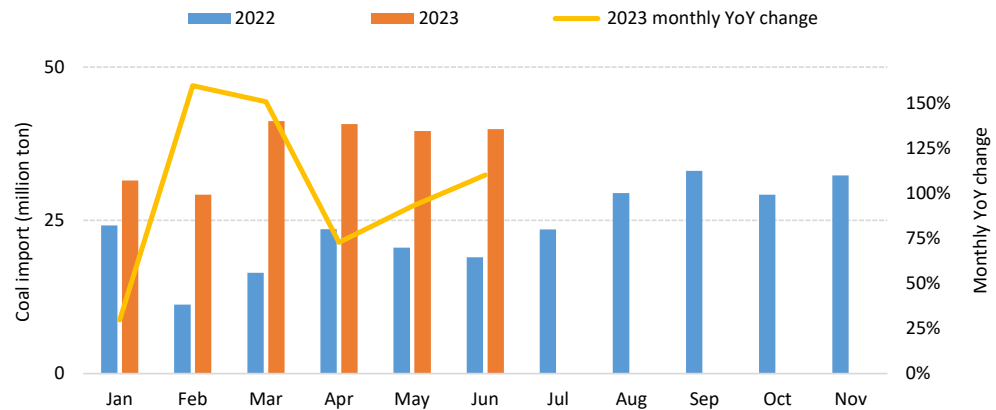


Figure 6. China's monthly coal imports: 2022 vs. 2023

Source: [China Customs](#).

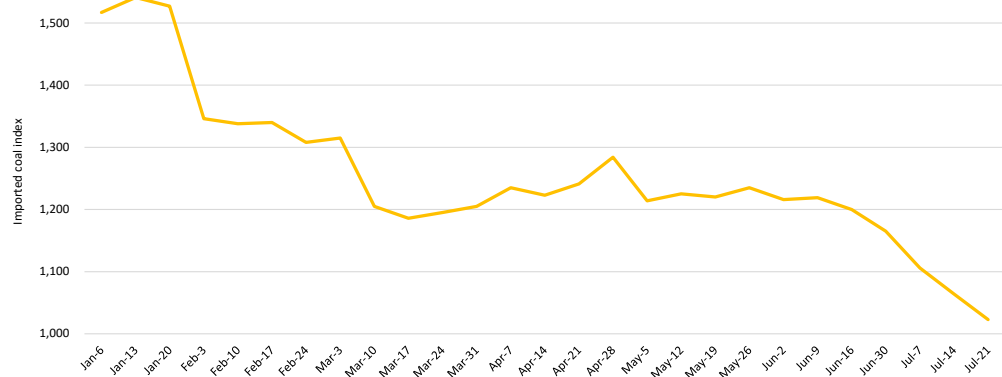


Figure 7. China's imported coal index

Source: CEC.

Coal consumption

Globally, according to [IEA](#), global coal demand is estimated to have grown by about 1.5% in the H1 2023 to a total of about 4 665 Mt, lifted by an increase of 1% in power generation and 2% in non-power industrial uses.

In China, the national coal consumption is mainly for the thermal power generation (56%~) and industrial production of steel (16%~), cement (13%~) and chemical products (7%~).

In the Q2 2023, the still weak property sector has dragged down the coal demand from cement and crude steel sectors. Meanwhile, the thermal power generation moved higher due to the declining hydropower output and the rising temperature. To meet the summer peak load, the coal inventory in national unified power plants reached [198 Mt](#) by the end of July 2023, 23 Mt higher than the same period of 2022, roughly equal to the demand

for 26 days. During H1 2023, coal related key sectors' production data as:

	Thermal power (TWh)	Crude steel (Mt)	Cement (Mt)
Output in H1 2023	2945.7	535.64	953
YoY growth rate in H1 2023	7.5%	1.3%	1.3%
YoY growth rate in 2022	0.9%	-2.1%	-10.8%

Table 2. Coal related key sectors' production in H1 2023

Source: NBS.

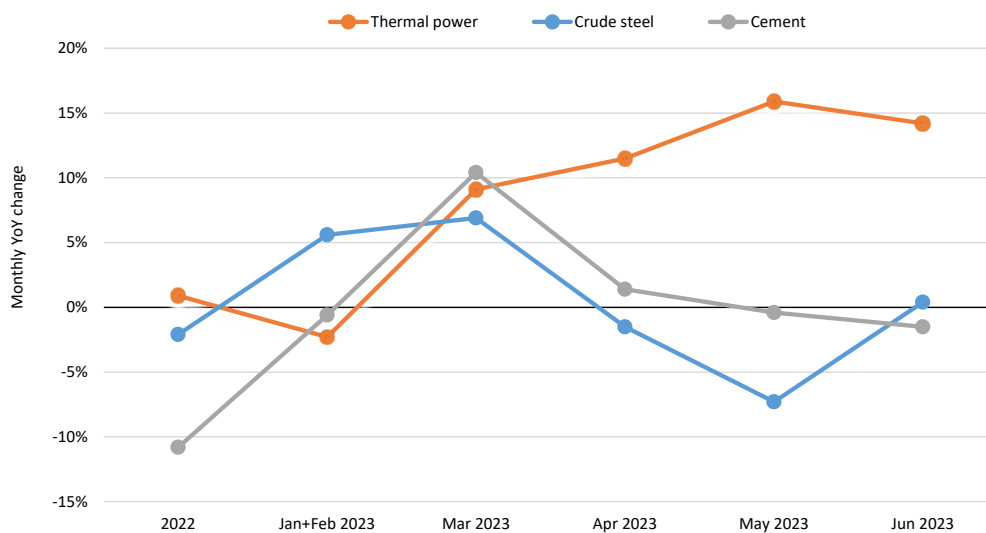


Figure 8. Monthly YoY change of production in main coal related sectors in 2023

Source: NBS.

Coal-fired power plants

According to CEC, China's total power capacity advanced 10.8% YoY in H1 2023, reaching 2710 GW, with the breakdown as the following figure. Thereinto, renewable power capacity grew by 18.2% YoY, hitting 1322 GW, historically exceeding coal power capacity.

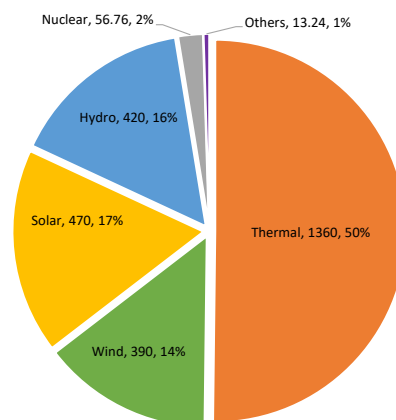


Figure 9. Power capacity mix by H1 2023 (Unit: GW)

Source: CEC.

H1 2023	Total	Hydro	Thermal	Nuclear	Wind	Solar
Incremental capacity	140.96	5.36	26.02	1.19	22.99	78.42
YoY growth rate	10.8%	4.5%	3.8%	2.2%	13.7%	39.8%

Table 3. Incremental power capacity by technology in H1 2023 (Unit: GW)

Source: CEC.

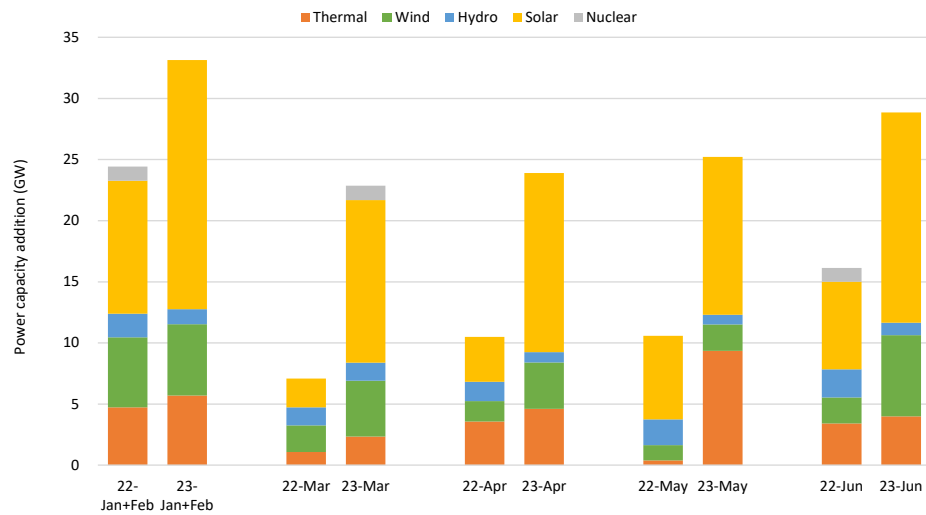


Figure 10. Power capacity additions by technology: 2022 vs 2023

Source: CEC.

In the H1 2023, China's power generation by technology is presented as the following table.

H1 2023	Total	Thermal	Hydro	Nuclear	Wind	Solar
Power generation	4167.96	2945.7	450.42	211.89	424.64	135.27
YoY growth rate	3.8%	7.5%	-22.9%	6.5%	16%	7.4%

Table 4. Power generation by technology in H1 2023 (Unit: TWh)

Source: NBS.

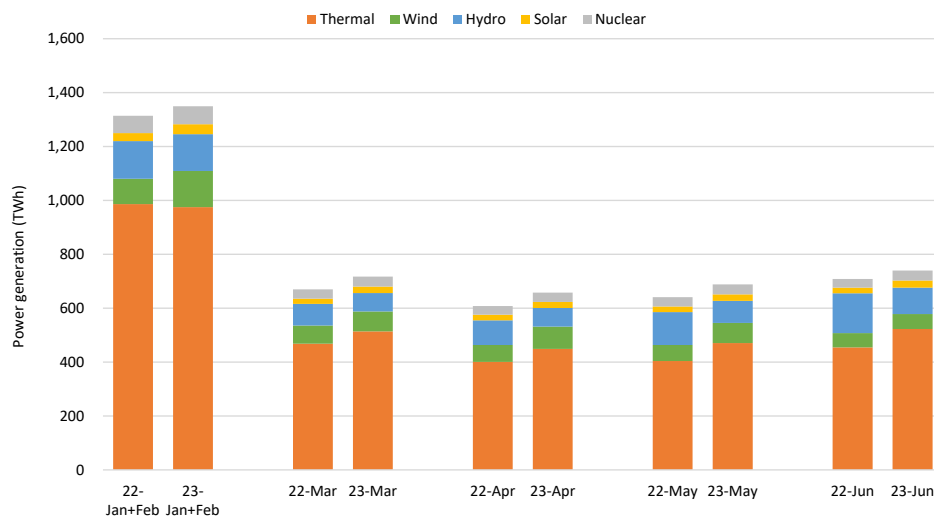


Figure 11. Power generation mix by technology: 2022 vs 2023

Source: NBS.

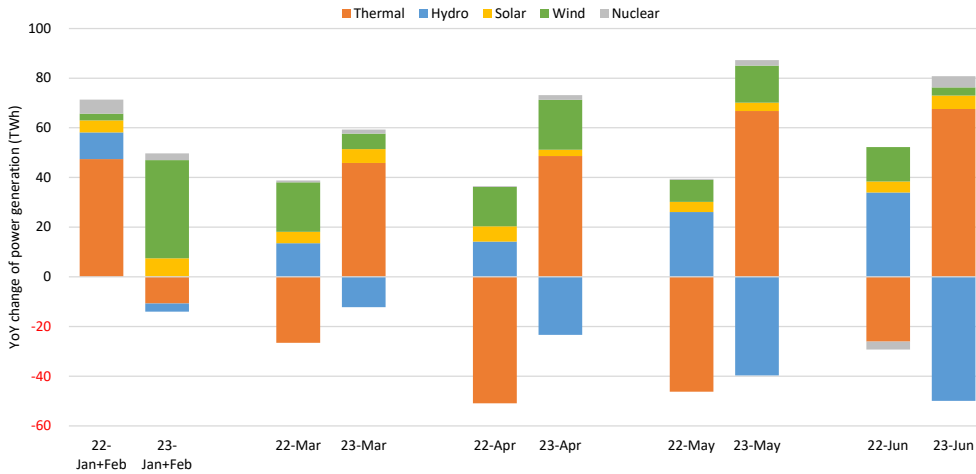


Figure 12. Power generation addition by technology: 2022 vs 2023

Source: NBS.

During the H1 2023, the total power investment increased by 53.8%, reaching 331.9 billion RMB. Thereinto, investment in clean power, focusing on hydro, nuclear, wind, solar and biomass, accounting for 88.2% of the total investment.

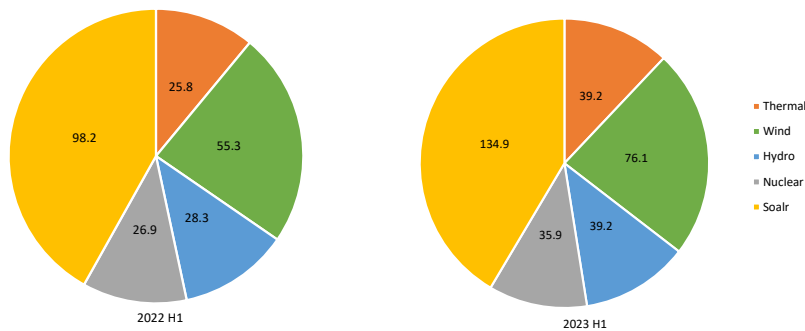


Figure 13. Power investment by technology (unit: billion RMB)

Source: CEC.

Key Developments in China



NDRC issued the notice on promoting the healthy development of modern coal chemical industry

On July 27th, 2023, the [NDRC](#) issued the notice on promoting the healthy development of modern coal chemistry industry. The notice proposed:

- To strictly control the scale of modern coal chemical production capacity and new coal consumption, strengthen the clean and efficient utilization of coal, and promote the high-end, diversified, and low-carbon development of the modern coal chemical industry (excluding coal to oil, coal to gas, and other coal-made fuel). For the new coal chemical projects, stable coal supply should be ensured. However, the coal supply for power generation and heating demand should be prioritized. It is not allowed to reduce the coal for supply guarantee to construct coal chemical projects.
- In addition, the notice further emphasized optimizing industrial layout. New projects should be concentrated on areas with relatively abundant coal and water resources and good environmental capacity, to promote industrial agglomeration and industrial park development. New coal chemical production capacity is strictly prohibited in key areas for Air Pollution Prevention and Control.
- The notice also proposes to strengthen project energy conservation review and environmental supervision. Proposed and ongoing projects should fully reach the benchmark level of energy efficiency, and existing projects with energy efficiency lower than the benchmark level must complete renovation and upgrading by the end of 2025.

The second meeting of the Central Comprehensive Deepening Reform Commission

On July 11th, the second [meeting](#) of the Central Comprehensive Deepening Reform Commission approved a series of official documents, and stressed that building a higher-level new opening economic system and gradually shifting from the “dual control” of energy consumption to carbon emissions. In the energy field, three documents have been approved:

- Opinions on Promoting the Shift from Dual Control of Energy Consumption to Dual Control of Carbon Emissions.
- Implementation Opinions on Further Deepening the Reform of the Oil and Gas Market System to Enhance the National Oil and Gas Security Capacity.
- Guiding Opinions on Deepening the Reform of the Power System and Accelerating the Construction of a New Type of Power System.

NEA issued the notice on carrying out comprehensive supervision of the construction and operation of regulating power sources

On May 4th, 2023, the [NEA](#) issued the notice on carrying out the comprehensive supervision of monitoring the existing and under-construction flexible power generation capacity, including pumped hydro, flexibility retrofitted coal power, gas power, conventional hydropower, and energy storage systems. The purpose is to review existing flexible power capacity and well plan the further capacities, to better support high percentage of renewable power penetration.

NMSA issued the notice on ensuring the safety of coal mine production and related employee

On April 6th, the National Mine Safety Administration ([NMSA](#)) issued the notice on ensuring the safety of coal mine production and related employee. The notice proposed:

- To establish a timely reporting system for major changes in coal mine disaster conditions.
- To establish a system for timely evacuation of personnel in emergency situations such as accidents in coal mines.
- To strictly implement the work responsibilities of the above two systems.



Key Developments: International Perspective

August 4 Poland Nears Coal Glut Prompting Powerful Union to Raise Alarm ([Bloomberg](#))

Poland's hard-coal reserves have almost doubled since last year, prompting a powerful union to warn about the consequences for the country's own miners just months before a tightly contested parliamentary election. Coal stockpiles jumped 83% to 10.8 Mt in May from a year earlier, according to energy think tank InStrat. The government in Warsaw, which banned Russian coal imports in March 2022, prompted state-run energy producers to import heavily from countries like Colombia, Kazakhstan and South Africa to avoid shortages, left local mines struggle to sell their coal amid surplus. Coal has long been politically important in Poland, where 75,000 are employed as miners and millions of households depend on the fuel for heating. Aging coal plants provide about 70% of the nation's electricity.

July 24 Tycoon Jindal's JSW Steel Scouts for Global Coal Mining Assets ([Bloomberg](#))

JSW Steel Ltd. is on the lookout for coal assets globally as the tycoon Sajjan Jindal-led mill seeks to tie up raw material supplies for its expansions in India. India's top producer of the alloy has plans to scale up its capacity to 50 Mt by the end of the decade. The Mumbai-based firm has been scouring mining resources locally and in other countries to avoid supply shocks and price risks. Earlier this month, it is said to be considering bidding for a stake in the coal unit of Vancouver-based Teck Resources Ltd.

July 12 Vietnam's coal emissions primed for surge after imports jump ([Reuters](#))

Vietnam's thermal power emissions are primed for a steep climb this summer after the country's imports of thermal coal soared to their highest levels in three years. Vietnam's utilities boosted imports of thermal coal to more than 3 Mt in both May and June this year from a monthly average of around 1.5 Mt throughout 2022, as a lengthy heatwave across the country caused a spike in air conditioner use. The recent import spree brings Vietnam's total imports for the first half of 2023 to roughly 13.5 Mt, which is the highest for that period since 2020. The sharply higher coal imports indicate that power producers have lifted coal-fired electricity generation to keep up with the demand for power-hungry air conditioning, and may generate commensurately higher power sector emissions going forward.

June 19 EU split over subsidies for coal plants as Poland seeks extension ([The Guardian](#))

EU nations have failed to agree on new plans for energy supplies across the bloc after a bid to extend subsidies for coal burning power stations was blocked. EU energy ministers meeting in Luxembourg ended talks without a joint stance. The talks were complicated by a late proposal by Sweden, which holds the EU's rotating presidency, to allow countries to prolong capacity mechanism subsidies for coal power plants that pay generators to keep enough capacity on standby to avoid blackouts. Countries including Austria, Belgium, Germany and Luxembourg had objected to the proposal on coal subsidies, saying it would undermine Europe's goals to fight climate change. However, some countries consider this a measure to help Poland, which uses coal to produce about 70% of its energy.

June 15 UK's National Grid in talks with Drax to keep coal plant online ([Financial Times](#))

The manager of Britain's electricity network is in talks with the owner of one of the country's last two remaining coal-fired power plants to stay open for another winter, as part of efforts to avoid energy supply disruption. National Grid ESO is seeking to reach a deal with Drax to keep online two coal units totaling 1.3 gigawatts of capacity — about 2 per cent of peak daily demand — near Selby, North Yorkshire, despite the UK power company already having started shutting down the facility.

Progresses of EFC's Coal Transition Task Force

Key Measures and Implementation Paths for Reduction of Pollution and Carbon Emissions

On July 24th, supported by EFC, Chinese Academy of Environmental Planning held a mid-review meeting of Research on Policies for Synergizing Pollution Control and CO₂ Mitigation and Its Application in China. The second component of this project conducted systematic analysis and comprehensive evaluation of the coordinated measures for air pollution control and carbon emissions control in the thermal power industry, and studied structural adjustments, technical path optimization and technologies for coordinated reduction of multiple pollutants and carbon dioxide, with the purpose of providing support for integrated and deep-going actions to combat air pollution, conserve energy and reduce carbon emissions in the thermal power industry.

Low Carbon Transition Pathway of Coal Power in China

On July 17th, EFC held the final review meeting of Low Carbon Transition Pathway of Coal Power in China (Stage 2) by Professor Wang Ke from Renmin University of China. The experts gave some suggestions: 1. It is necessary to compare the advantages and disadvantages of different pathways, and analyze the differences in coal power capacity and generation under the four transition scenarios; 2. For policy recommendations, it is suggested to focus on the perspective of risk prevention such as stranded assets and credit defaults, how to promote the transformation of the role of coal power, and the difference between incremental coal power and existing coal power disposal.

Application of Green Hydrogen in Coal Chemical Industry

On June 29th, our grantee PKU completed the project of Technology and Economic Evaluation and Feasibility Analysis of Future Investment. The main outcomes

include: 1. The project results were published in the 2022 Blue Book of Oil and Gas and New Energy of the Chinese Academy of Social Sciences (China Economic Press, ISBN978-7-5136-7301-3); 2. In cooperation with the Hydrogen Energy Industry Alliance, the project research work supports the formulation of the Ordos Hydrogen Energy Industry Development Plan (Efufa [2022] No. 45); 3. The research results are used as an important reference for the mid-term evaluation of the 14th Five-Year Plan for Energy in Ordos City and the Implementation Plan for Scientific and Technological Innovation of Carbon Peak and Carbon Neutrality in Ordos City; 4. In cooperation with the Hydrogen Energy Industry Alliance, the results are used as reference materials for the topic of "Coupled Integrated Development and Business Model Research of Hydrogen Energy Storage and Power System" of the Science and Technology Department of the National Energy Administration; 5. A set of green hydrogen cost economy analysis model is formed, which can be used to support the formulation of relevant industrial policies.

Roadmap of Just Transition of Shanxi Province under the "Dual Carbon" Target

On June 14th, funded by EFC, Shanxi Coshare initiated the Study on the Roadmap of Just Transition of Shanxi Province under the "Dual Carbon" Target: Phase I the Coal Mining and Dressing Sector. The grantee collected the background information such as Shanxi's coal production/consumption, industrial structure, just transition policies, and so on. In the next step, they will take field trips to typical counties and companies for further investigation. It is expected to deliver the Roadmap of Just Transition of Shanxi Province under the "Dual Carbon" Target during the Taiyuan Energy Low Carbon Development Forum this year.

Technical Policy Research on Biomass Application in Power System under Dual Carbon Goals

On June 12th, supported by EFC, China Association of Circular Economy completed the technical policy research on biomass application in power system under dual carbon goals. Based on the project, the grantee suggested the development path of biomass energy in China based on dual carbon goals. Besides, the grantee summarized several existing problems of biomass power, and suggested to build up the carbon emission accounting methodology of biomass power, as well as to set up the energy utilization evaluation index system of biomass power, and so on.

National Policies and Local Experiences in the Clean Energy Revolution

On June 1st, EFC, the China Coal Society, and the Jackson Hole Center for Global Affairs jointly organized the fourth session of the U.S.-China Coal Regions and Energy Transition Track II Dialogue. The session, titled National Policies and Local Experiences in the Clean Energy Revolution, was designed to focus on national policies and progress introduction, as well as case studies and local experiences. More than 50 Chinese and American stakeholders, policymakers, and experts attended the meeting.

Suitability Evaluation of CCUS for China's Coal-fired Power Plants

On May 19th, EFC held a mid-term review meeting for the suitability evaluation of CO₂ storage in saline aquifers matching with China's coal-fired power plants. The grantee, Zhejiang Jufengguang Technology Co., Ltd., completed the evaluation of the suitability of matching the sources and sinks of CO₂ geological storage in saline aquifers for major coal-fired power plants in China, and provided suggestions for the CCUS transformation design and retirement order of coal-fired power plants for the retirement process during the upcoming 10-40 years.

EFC and Tsinghua Visit Linfen for Field Trip and Project Discussions

On May 16th, EFC signed an MOU with Linfen Municipal Government, focusing on synergizing pollution reduction with carbon reduction and realizing high-quality socio-economic development in industrial, coal-fired boiler, coal power, and scattered coal treatment sectors.

Stand First and Break Second with Steady Progress

On May 12th, EFC held the first session in 2023 of Energy China, with the theme of "the energy transition starts again: stand first and break second with steady progress." Mr. DU Xiangwan - Academician of the Chinese Academy of Engineering and Mr. ZHU Min - Vice Chairman of China Center for International Economic Exchanges gave the keynote speeches. Six experts from power and finance fields joined the panel discussion. The entire session was broadcast live by China News Service, who also spread the news releases.

Coal Power/Energy Storage and New Power System

On May 11th and July 25th, the Coal Transition Task Force held two roundtable meetings themed on coal power/energy storage and new power system. In the first roundtable, a consensus was formed that it is critical for non-fossil fuel storages to mature commercially within the next 10-20 years to gradually replace coal power as flexibility. In the second roundtable, pumped-hydro storage and electrochemical storage are the main topics, and all the experts confirmed the significance of energy storage in new power system.

Stranded Assets and Financial Risk of Coal Power Plant

Supported by EFC, Professor WANG Ke from Renmin University of China published an article in Energy Review in April 2023. In this article, he suggested to beware of the risk of stranded assets caused by coal power technology transformation.





Highlights of Knowledge from the Field

Coal Market Update ([IEA](#), July 2023)

In 2023, coal markets have so far been less volatile. The report expects coal demand grew by about 1.5% in the first half of 2023 to a total of about 4 665 Mt, backed by both an increase of 1% in power generation and 2% in non-power. In the second half of 2023, a decrease in global coal-fired power generation is expected to more than reverse the first-half gains. For the whole year, the demand from the power sector is expected to be 0.4% lower at about 5 597 Mt, while the growth will continue in the non-power sector, reaching 2 791 Mt. Overall global coal demand is expected to remain flat at around 8 388 Mt (+0.4%) in 2023. Moreover, weather conditions and the economies of large coal consuming nations will be key influencing factors to the global coal demand. In China, the coal demand hit an all-time high in 2022, mainly driven by the lower calorific value of coal produced in China and higher demand to produce synthetic liquid fuels, plastics and fertilizers. In 2023, China's total coal demand will grow by about 3.5% to 4 679 Mt, with demand from the power sector up 4.5% and demand from non-power uses growing by 2%.

Financing the Managed Phaseout of Coal-Fired Power Plants in Asia Pacific ([GFANZ](#), June, 2023)

This consultative report aims to provide voluntary guidance for financial institutions regarding the financing of the managed phaseout of coal-fired power plants. APAC countries face certain challenges in transitioning away from coal. The coal power usage is expected to continue to rise in Asia for several more years due to high dependencies on coal, reinforced by domestic energy policies and rising electricity demand, populations and income levels. APAC coal power plants are relatively young and typically insulated from market forces. Major economies and Development Financial Institutions (DFIs) have announced the end of cross-border coal financing. However, where individually developed coal policies designed to support net-zero transition also exclude financing to those countries and entities which have credible plans to accelerate the phaseout of coal. Some APAC countries face a high cost of capital that may slow transition, requiring a systemwide approach to be developed.

Navigating the Path to a Just Transition: Employment Implications of China's Just Transition ([UNDP](#), June 2023)

The report examines the employment impacts of China's energy transition on two key industries: the coal mining and preparation industry, as well as the electricity industry. According to the report, 52% of jobs in the coal sector (1.3 million jobs) are projected to disappear by 2030 following China's current policy trajectory. The report also projects a decrease of 30% in thermal power employment in the next decade, but due to new jobs created in renewable energy, overall employment in the power sector is expected to increase. By providing empirical evidence, the research aims to inform policymakers on how to best balance the energy transition and social considerations. This is particularly important as China works to achieve its dual carbon goals, which will entail profound economic and social changes.

World Energy Investment 2023 ([IEA](#), May 2023)

This report provides a full update on the investment picture in 2022 and an initial reading of the emerging picture for 2023. The recovery from the Covid-19 pandemic and the response to the global energy crisis have provided a major boost to global clean energy investment. Increases across almost all categories push anticipated spending in 2023 up to a record USD 2.8 trillion. Renewables, led by solar, and EVs are leading the expected increase in clean energy investment in 2023. The momentum behind clean energy investment stems from a powerful alignment of costs, climate and energy security goals, and industrial strategies. Investment in coal supply is expected to rise by 10% in 2023, and is already well above pre-pandemic levels.

